DOCUMENT RESUME

ED 098 627 CS 500 841

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TITLE A Comparative Morphology of Groups: A Systems Perspective.
PUB DATE Apr 74
NOTE 30p.; Paper presented at the Annual Meeting of the International Communication Association (New Orleans, Louisiana, April 17-20, 1974)

EDRS PRICE MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS *Educational Research; *Group Dynamics; *Group Structure; Interaction; Interaction Process Analysis; *Systems Analysis

ABSTRACT

The purpose of this paper is to suggest a comparative morphology of groups which would be applicable to the whole of social scientific research. The key to the morphological classes suggested is not a focus on the group system itself but on its relationship with the next higher system--the group system's environment. The information exchange between the group and its environing system provides the group system with its energizing life force, i.e., tensity. The precise nature of that information exchange differentiates among classes of tensity. The morphological classes--extensive, intensive, detensive, distensive, and attensive--are described and illustrated. Preliminary empirical testing through correlations of interaction analyses of five groups suggests that it is possible to differentiate among tensive classes by differences in interaction patterns. The data suggest further that groups not possessing a specific variety of tensity can be identified through their interaction patterns as belonging to a specific tensive class. Results from preliminary empirical analyses suggest numerous implications for further research in order to integrate and increase the ability to generalize group research. (Author/WR)

A COMPARATIVE MORPHOLOGY OF GROUPS: A SYSTEMS PERSPECTIVE

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ABSTRACT

Recent reviews of small group research have unanimously found the field wanting in regard to integration and generalizability of research results. Further review of current trends reveals that group research typically fails to consider the essential nature of "groupness" within the study. Each researcher has tended to classify groups according to his disciplines parochial interests so that the overall study of groups can only questionably be integrated or generalized across fields of specialized interests. The purpose of this paper is to suggest a comparative morphology of groups which would be applicable to the whole of social scientific research.

The key to the morphological classes suggested is a focus on not the group-system itself but its relationship with the next higher system--the group-system's environment. The information exchange between the group and its environing system provides the group-system with its energizing life-force--i.e., tensity. The precise nature of that information exchange differentiates among classes of tensity. The morphological classes--extensive, intensive, detensive, distensive, and attensive--are described and illustrated.

Preliminary empirical testing through correlations of interaction analyses of five groups suggests that it is possible to differentiate among tensive classes by differences in interaction patterns. The data suggest further that groups not possessing a specific variety of tensity (e.g., families) can be identified through their interaction patterns as belonging to a specific tensive class. The empirical rationale is based on relative rather than absolute comparisons and is by no means a thorough validation of the morphological classifications. Results from the preliminary empirical analyses suggest numerous implications for further research in order to integrate and increase the generalizability of group research.

A COMPARATIVE MORPHOLOGY OF GROUPS: A SYSTEMS PERSPECTIVE

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In 1966 McGrath and Altman (1966, p. 76) wrote. "The greatest need in the small group research field is for more and better theory.' Four years later, Mortensen (1970, p.304) decried the "absence of theoretical moorings' in small group research followed closely by Fisher and Hawes (1971, p. 444) who asserted the "need for an integrative theory" and Larson's (1971, p. 106) observation that "a firm conceptual and theoretical base for many of our studies seems to be missing, or at least poorly explicated." Despite these pleas for integrating small group research via a common conceptual scheme, little or no integration is evident in recent published group research.

One of the barriers mitigating against the integration of group research may be our restricted conceptual perspective. McGrath and Altman (1966, p. 59, 72-74) and Bormann (1970, p. 210) argue against an input-output orientation to group research. Yet, many of the scholars who suggest new directions for group research continue the reductionistic perspective of viewing a group in terms of specified internal and external variables used to predict group outcomes. Larsen, (1970, p. 106), for example, concerns himself with"which group outcomes are most in need of study." Couran (1970, p. 28) emphasizes the need to focus on group outcomes and discusses sequential relationships among communicative acts in S-R terms rather than as instances of collective structure (Weick, 1968, p. 43-48). Preliminary to the present conceptual schema of small groups, then, is a de-emphasis of reductionism implicit in the input-output research design which focuses on variables manipulated in order to predict group outcomes.

The purpose of this paper is twofold -- to establish the parameters of the nature of a "group" and to integrate the study of groups into the whole of social

scientific research. In order to accomplish these objectives, an empirical research and past conceptualizations of small groups will be reviewed focusing on research attempts to identify the essential characteristic of "groupness." An alternate conceptual schema will be suggested which integrates the study of groups into a single morphological system. Preliminary empirical testing serves to confirm the potential existence of such a morphology of groups and leads to specific directions for further empirical study.

TRENDS OF GROUP RESEARCH

The number of pages devoted to research or theorizing about small groups is so large as to defy any comprehensive review. In order to expedite a review of the trends implicit in this literature, representative examples of both empirical and theoretical literature shall be surveyed and classified.

The Empirical Trends

Riecken and Homans (1954, p. 786-789) in reviewing small group research indicate the existence of four basic perspectives used by the small group researcher -- the group as a unique social system, the group as a social institution, the group as a convenient vehicle or setting for the study of interpersonal relationships, and the group as a stimulus on the larger society. At the same time, researchers have empirically typologized groups using four discernible bases underlying their classification scheme -- requirements of the task setting or environment, member-to-member relationships, member-to-group relationships, group-to-environment (social) relationships, group-to-goal relationships. Overlaying these five typological bases and four research perspectives on the empirical research literature forms Table 1:

TABLE 1

BASES FOR CLASSIFYING TYPES OF GROUPS

PERSPECTIVES USED IN GROUP RESEARCH

	Task	Member-to-Member	Member-to-Group	Group-to-Environment	Group-to-Goal
Unique System	Conjunctive Disjunctive[1]		Autonomous, Organizational, Institutional, Problem-Solving[9]		
Social Institution		Family, cousin, stranger[6]	Reference Groups:[10] Family, peer, informal re-socialization[11]	Crowd, band, group Primary (restrainer) Secondary (organizational)[14]	
Vehicle for Study	Task Functions;[2] Effector, sensor, control,[3] production, discussion, problem-solving[4] simple, complex[5]	Psyche, social;[7] Homogeneous, Heterogeneous[8]	Voluntary, involuntary;[12] Leadership styles[13]	Task, Social, Mixed;[15] Homocultural, Hetercultural[16]	Therapy groups (Gestalt, Process etc.)[19][20]
Stimulus on Society				Political pressure, opinion;[17] Conflict, criminal, Retreatest[18]	

1. Thibaut and Kelly (1959)
2. Carter, Haythorn & Howell (1950)
3. Cohen (1958)
4. Hackman & Jones (1965)
5. Shaw (1964)
6. Berger & Berger (1973)
7. Jennings (1947)
8. Harvey, Hunt & Schroder (1961)
9. Berelson & Steiner (1964)
10. Hyman & Singer (1963)
11. Dunphy (1972)
12. Olmstead (1959)
13. Lewin, Lippitt, & White (1939)
14. Anzieu & Martin (1969)
15. Berelson & Steiner (1964)
16. Fiedler (1967)
17. Ziegler (1964)
18. Cohen (1955)
19. Lieberman et al (1972)
20. Gibb (1971)

The review of empirical research classifications schematized in Table 1 reveals several important implications for the groups researcher. First, much group research fails to consider the nature of the group itself. Despite the type of variables studied (e.g., task, interpersonal, contextual) the researcher's major concern is not the group itself but some peripheral focus -- typically the individual member and his relationships with other members.

Some research deals specifically with the group as a systemic level -- notably columns 1, 3, and 4 in Chart 1. In this sense the group is conceived as a specific level of analysis. In Weick's (1969, p. 45) words, "A common assertion about groups is that . . . 'the group is an emergent level.' The obvious problem here is that we have no idea just what it is that emerges. . . .the only way we can learn much about any of these levels is if we know how they are tied together, that is, how one level interacts with another level." These interlevel relationships remain confounded by an overly simplified research view. According to Table 1, either the group acts upon the environment (Row 4, Column 4) or the environment acts upon the group (Column 1). In any case, researchers typically view the relationship between the group and its environment as unidirectional or they fail to perceive any relationship at all (Column 2, 3, and 5). The present morphology recognizes the complexity of this interpolar relationship and attempts to reduce this complexity to empirically observable group characteristics.

Theoretical Rationale

Jurgen Ruesch (1969) has suggested four specialties, which typify conceptualizations of human communication -- structure specialties, field specialties, symbolic specialties, and social order specialties. These specialties can serve to organize the theoretical or conceptual schema advanced by small group theorists and diagrammed in Table 2:

TABLE 2

THEORETICAL PERSPECTIVES OF GROUP BEHAVIOR

Structure Specialty	Field Specialty	Symbolic Specialty	Social Order Specialty
Roby (1968) "Outcomes" Research	Levin (1951) Blau (1964)	Bales (1950) Cattell and Wispie (1948) Thibaut and Kelly (1959) Festinger (1959) Bion (1959)	Homans (1950)(1961) Goffman (1959)

Generally speaking, all the conceptual schema listed in Table 2 focus on some aspect within or without the group which serves to energize the group, i.e., give the group its life-force. That energizing factor might be considered a form of tension which, depending on the specific special emanates from a specific source. For example, Roby's structural specialty considers the source of tension to be the group' task setting. Lewin's field specialty analyzes group behavior spatially as the g... locomotes in, around, and through force-fields characterized by positive or negative valences. Thibaut and Kelley's symbolic specialty conceptualizes tension between individual needs and group goals in order to actualize those goals. Homan's social order specialty conceives of internal and external systems creating the tension which activates group life.

In all cases, the energizing factor of groups comes either from without or from within the group and typically requires that the group be viewed as a closed system with limited capability of independent action or self-regulation. The group at systemic level, is typically seen as a reactive mechanism with the capacity only to react to initial conditions of internal structure or external deterministic forces.

GROUP MORPHOLOGY AND GROUP INTENSITY

One of the most formidable and long-standing problems in the study of groups and social organization is the great range of recognizable types of groups. To take a page from the development of other fields of study, the biological study of contemporaneous life forms (comparative morphology) was the stimulus to evolutionary theory. Perhaps the study of groups cannot progress rapidly until a similar confirmative morphology of groups becomes accepted.

The Value of a Group Morphology

Various disciplines have fossilized groups. The sociologists have their primary and secondary groups while psychiatrists have classified groups according to different

therapeutic treatments. The political scientists have their interest and pressure groups. And, of course, there are numerous and unclassifiable professional and social groups. Each discipline has assempled their own typology of groups in order to furthe their understanding of interpersonal relationships within the parameters of their own field of study. Simply speaking, groups represent a useful concept for a variety of academic disciplines.

The most fundamental criticism of these typologies is their lack of validity. When classifications are made solely as ends in themselves, they share the fatal weakness of being based on an intuitive definition of types and not on a systemic analysis of actual variability. Actual variability among groups, empirically observable and based on a systemic analysis, is the locus presently used to study contemporaneous forms of group life.

The primary concern of comparative morphology is the defined characteristics of the phenomena and not ideal types in the classical sense. The "type" is an abstract concept with no more basis in reality than the "average" man. The choice of actual characteristics, of course, is inevitably arbitrary to some extent. Mortensen (1970, p. 306) suggests, "There is something arbitrary in ever judging that one set of variables (characteristics) is more relevant to a given subject than any other. . .for without specifying some parameters of study a subject, however interdisciplinary, loses all claim to a distinctive territory." The present study of groups is certainly interdisciplinary but not a very distinctive territory. The present comparative morphology of groups is meant to be a theoretical context within which data can be placed and analyzed. Biologists (Weinberg, 1938) have suggested that guiding principle of this paper -- the comparative morphologies should be broad in scope with their point of departure "systematic doubt." The present morphology then, is intentionally abstract, for theoretical significance, and is subject to revision.

The Nature of Groups

Definitions of "group" abound in the literature. Such definitions (see Shaw, 197 p. 5-10) characterize groups in terms of member perceptions, motivation, group goals, social organization, interdependence of members, and interaction among members. The result is a variety of definitions and characteristics of groups which, generally speaking, are rather congruent with each other and overlap considerably. As Shaw (1971, p. 5) points out, ". . .it is evident that different authors are simply looking at different aspects of the same phenomenon."

The most pertinent observation to be made about the attempts to distinguish group from aggregates is that they fail to approach the "nature" of a group. That is, each definition selects one or more attributes which are common to nearly all groups but does not attempt to define the inherent nature of "groupness." Such definitions are inherently superficial and, to some extent sterile. One cannot discover the nature of humanness, for example, by describing the attributes of height, physique, color of hair, eyes, and skin common to most humans. One can define the nature of humanness only through a more penetrating philosophical and theoretical analysis.

A group is, as Ashby (1968) illustrates, a self-organizing system. Ashby describes the essence of organization as the principle of "conditionality" of a system in which a "product space" of possible choices or events or states-of-being characterize the functioning of the system. Randomness, i.e., nonorganization is therefore the absence of a correlation between one state or choice in the product-space with any other. "Thus," according to Ashby (p. 109), "the presence of 'organization' between variables is equivalent to the existence of a constraint in the product-space of the possibilities." A system is organized to the extent that constraints in the product-space exist -- whether those constraints come from within or without the boundaries of the system.

Ashby goes on to point out that the principle of self-organization must be understood as an evolutionary process of a system's adapting itself to constraints in its product space. In this sense, a system is not necessarily constrained due to some antecedent variable or combination of variables. In fact, Ashby (p. 115) cautions, ". . .looking for special conditions is quite wrong. The truth is the opposite -- every dynamic system generates its own form of intelligent life, is self-organizing in this sense." In other words, the principle of self-organizing, as Ashby visualizes it, is a property of every system precisely because ". . .every isolated determinate dynamic system obeying unchanging laws will develop 'organisms' that are adapted to their 'environments.'" Ashby presents the final point pertinent to the present attemp to define the nature of a group as a self-organizing system. The group, as is the cas of every isolated system, is a self-organizing system which has evolved over time. An this evolutionary process is a direct result of adaptating to an environment.

Thus, the group as a self organizing system, is the result of an evolutionary process of constrained possible states capable of adapting to its environing system as a result of its evolved functional structure.

Laszlo (1972, p. 43) provides the last step in our search for the nature of groupness as he continues Ashby's principle of self-organization to the following formula:

external forcings ---------- internal constraints = adaptive self-organization

Laszlo thus defines a self-organizing system as an inseparable relationship between external and internal constraints and emphasizes the inherent interdependence between the system and its environing system. Laszlo (p. 47) argues that systemic change, innovation, progress, stability, or functioning "is often difficult to understand when that system is considered in isolation." He goes on to argue more strenuously for concentrating on the interface of the system with its environing suprasystem as the key to understanding the nature of the system itself:

> Thus whereas the processes of self-stabilization can, in general, be clearly apprehended in reference to an isolated system viewed in relation to its environment, the processes of self-organization require that the strategic level of the next highest suprasystem be chosen for clear conceptual grasp. This is not to deny that self-organization takes place in a given system in relation to its environment. . .; it is only to suggest that self-organization is better amenable to conceptualization from the viewpoint of a population of systems than it is from that of the self-organizing single system itself.

Laszlo thus visualizes a hierarchy or "level-structure" of systems in which classes of systems are conceived as "wholes" on one level of the hierarchy while functioning as "parts" on the next succeeding level. Conceptualizing "group" as a level in the hierarchy of systems allows the observation of a group as a relatively isolated level in the hierarchy of systems. But in that the group is a self-organizing system, the nature of groupness can be observed only in relation to its next higher level -- its environing suprasystem. In this way, the concept of group is at once unique as a systemic level and integrated with all other social systems in the level-structure. As a self-organizing system, the nature of groupness can most strategically be observed as a relationship with its immediately environing suprasystem. The ensuing discussion of group tensities shall illustrate the nature of the relationship.

The Nature of Tensity

The specific relationship between a group-system and its environing system has been termed "tensity." As the energizing factor enabling the system to exist in time-space, tensity is perhaps the most descriptive term. Klein (1954, p. 151-152) suggests "Tension, or threat of it, is the precondition for all activity. The discrepancy between the state of the group and the state of the environment leads to tension. If th

tension did not exist, there would be no group goal, no learning, and in fact no grou for the group would be indistinguishable from its environment." Furthermore, accordi to Buckley (1968, p. 500), "Tension is seen as an inherent and essential feature of complex adaptive systems; it provides the 'go' of the system, the 'force' behind the elaboration and maintenance of structure." This specific form of tension, then, is a precondition for groupness. The tension developed from the relationship of the group with its environment serves to structure the system and allows it to exist as a syste whole. This system/suprasystem relationship is termed "tensity."

The specific variety of tensity describes the nature of the exchange of informa- tion between a system and its suprasystem. Allport (1960, p. 303) elaborates on the nature of this exchange: "There is intake and output of both matter and energy; ther is achievement and maintenance of steady states, so that the intrusion of outer energ will not seriously disrupt internal form and order; there is generally an increase of order over time, owing to an increase in complexity and differentiation of parts; Finally, at least at the human level, there is more than mere intake and output of matter and energy, there is extensive transactional commerce with the environment." Tensity is the term used to define the specific nature of this transactional commerce whether the group-system interacts, extracts, contracts, distracts, detracts or attracts with/from/to its environing system.

In essence, group tensity refers to the degree of unification, the nature of sel regulation, the degree of interdependence with its environment, and the degree of gro identity determined by the group boundaries. Thus, group tensity is the variability any self-organizing system dependent upon the extent and nature of the constraints placed upon it by its relationship with its immediately environing suprasystem.

THE COMPARATIVE MORPHOLOGY OF GROUPS

Consistent with the preceding discussions of the nature of groupness and the nat of intensity, the following morphological classes of groups derive their existence fr

different varieties of relationships which groups can have with their suprasystems. The list is not intended so much to be definitive as explanatory. Viewing the nature of groups within the rationale of group tensity and modern system theory is felt to b more important than defending any specific morphological class.

The Extensive Group

The extensive group is so termed because it reaches out, i.e., extends itself in the environment as symbolized by Diagram 1.

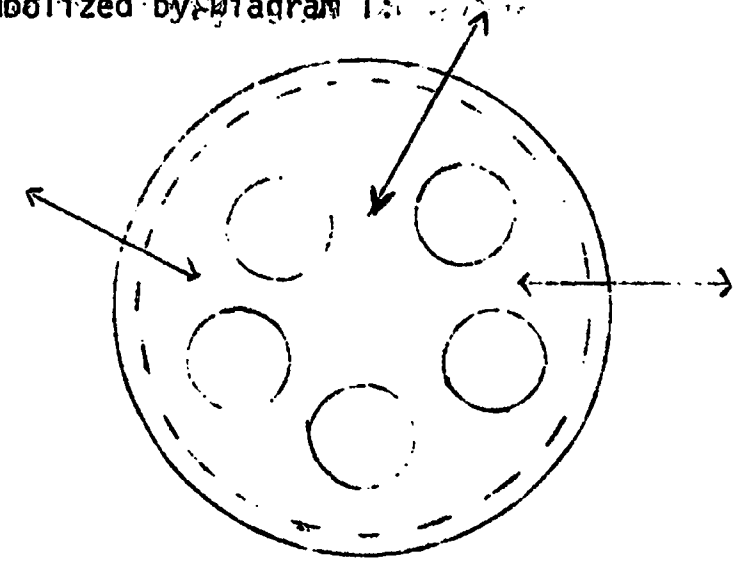

Diagram 1

The extensive group is formed as a response to some environmental stimulus. The group transacts with its environment in that it organizes, processes, and creates information rather than merely "receiving" it. Extensive groups would include nearly all task-oriented or decision-making groups. Such a group enacts its own environment (dotted circle), but that environment is predicated upon a free exchange of information with its external environment (solid circle). The extensive group is an open system, hence the free interchange of information with the external environment. Because of the openness of the system, the behavior of an extensive group is equifinal (see Fisher and Hawes, 1971) -- thus contributing to the group's growth and development.

The Intensive Group

Unlike the extensive group, an intensive group energizes itself by focusing its information processing inward and thus restricting exchange with the environment.

Diagram 2 illustrates the functioning of an intensive group:

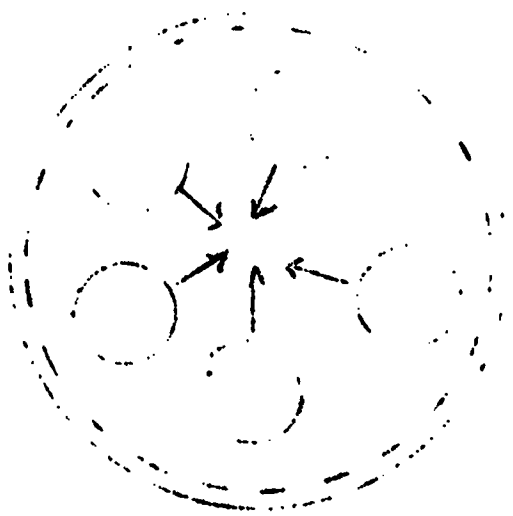

Diagram 2

A T-group or encounter group typifies the intensive group, often characterized by a here-and-now orientation. The intensive group experiences a minimum of environmental constraints with little information exchange between internal and external boundaries. One goal of an intensive group is to divorce itself from such influences external to the group itself. The intensive group thus acts only upon itself.

An intensive group emphasizes intrapersonal aspects in that intermember communication is designed to serve primarily the individual's self. In an effort to assert self-existence, establish a self-image, or dissolve tension within the self, group members turn toward themselves rather than toward others as the object of influence. Since the intensive group constrains its informational exchange with its environment, it is a closed system whose inevitable goal-state (equilibrium) is initially predetermined.

The Detensive Group

The detensive group receives its energizing force from its environment. That is the detensive group is restricted in its capacity for voluntary action simply because environmental constraints are more powerful. Thus, the detensive group is typically

capable of only responding to tensive forces emanating from the environing system, as Diagram 3 illustrates:

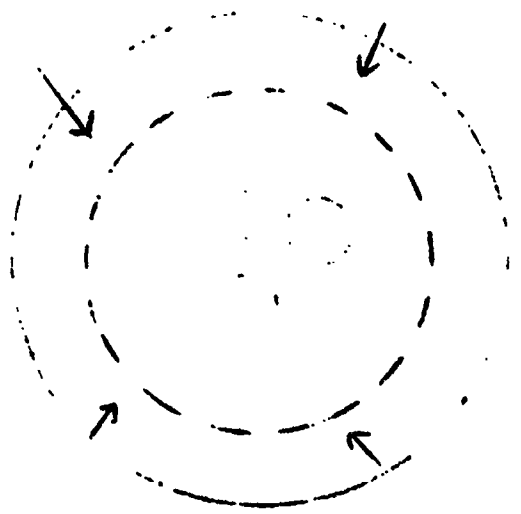

Diagram 3

The detensive group, in reacting to environmental constraints, creates its own environment within those limitations. Prisoners or an alcoholics anonymous group, for example, react to environmental constraints by artificially creating an environment of their own (dotted circle). Unlike the intensive or extensive group, however, detensive groups receive much more information from its suprasystem than they are capable of sending. This unidirectional relationship with their environment is essential because detensive group members are contained within their environing system without actually being members of it.

The Contensive Group

The contensive group is a union of two environmental factions who choose to enact an artificial group environment while remaining within their own suprasystem faction. Diagram 4 symbolizes this seemingly incongruent relationship:

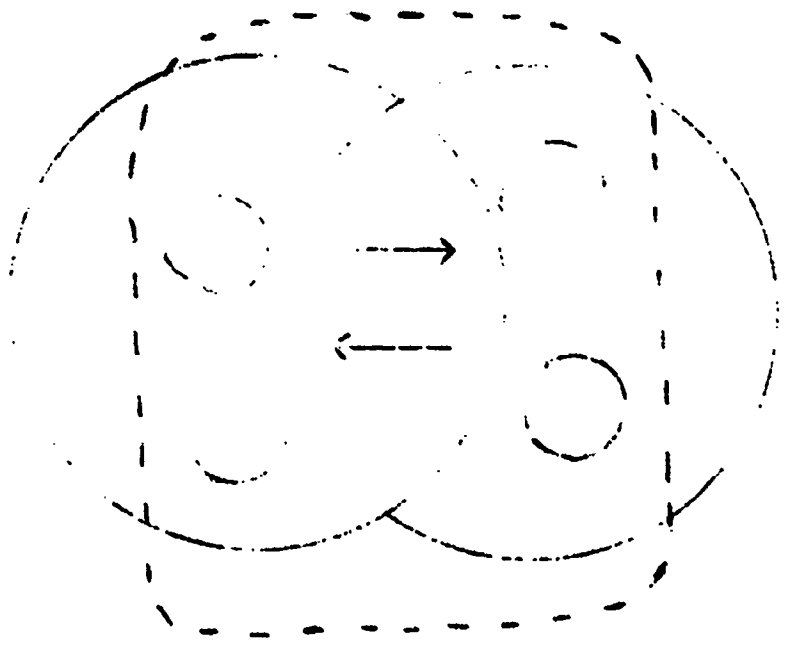

Diagram 4

A collective bargaining group, e.g., labor and management, is a contensive group. The two subgroups (labor and management) are responding to their subgroup constraints and must maintain interaction not only within their own bargaining group but with the environmental factions which they represent. The two groups thus contract with each other in order to share a single group environment (intersection of the two solid circles) while maintaining membership in their own environmental groups. Creating a shared environment when none in fact exists facilitates interaction thereby expediting achievement of their goal-state -- equilibrium and return to the environment.

Unlike the intensive group whose intent is to suppress the external environment, members of a contensive group never actually leave their respective environments. Moreover, contensive group members are really members of two systems within the contensive group's suprasystem and have as their contracted task the creation of the shared environment within which they continue to represent their faction of the suprasystem. The contensive group is a union of subgroups rather than an assembly of individuals which thereby deemphasizes the importance of the individual. When the shared environment is dissolved, members return to their environing system as a continuing

member of that system. Clearly contensive group members are not actually part of a single suprasystem but members of two or more subsystems within a yet larger supra-system.

The Distensive Group

The prefix "dis" means "to stretch out or swell." The distensive group attempts to increase the size of its enacted environment by recruiting new members and acting upon the environing system. Diagram 5 symbolizes the distensive group:

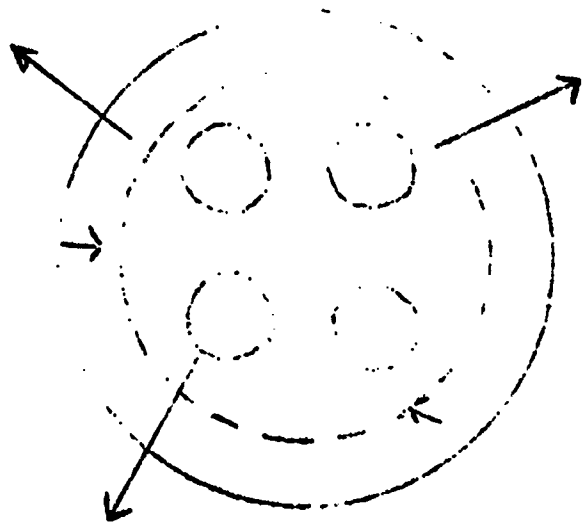

Diagram 5

The distensive group interacts with its external environment because it is constantly fighting environment constraints and trying to proselytize while being acted upon by a sometimes resistant suprasystem at the same time. Any social movement, e.g. religious or political action groups, may be termed a distensive group. The group is, of course, an open system and is in a constant state of interaction with the external environment as witnessed by its efforts to bring others into the enacted environment (outward arrows) and the environmental resistance to their attempts to influence them (inward arrows). While the detensive group enacts an environment as a reaction to environmental constraints, the goal of the distensive group is to control and eventually become the environment. Religious or political groups, for example, seek ultimately to gain control of the suprasystem, although such a goal is rarely attained

The Attensive Group

The attensive group, like the detensive group, receives its energy from a source not internal to the group. But the nature of that source of tensity differs significantly as illustrated in Diagram 6:

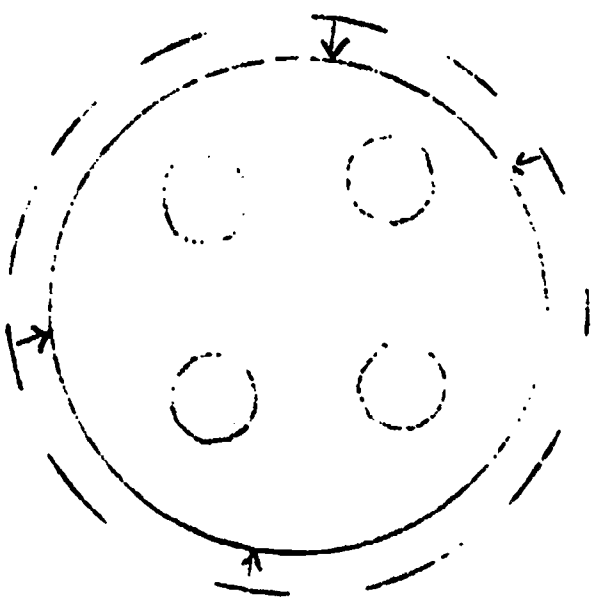

Diagram 6

Audiences, parties, and various social groups are examples of attensive groups. The attensive group differs pictorially from the detensive group by the reversal of the dotted and solid circles. The detensive group enacts an environment as a reaction to the external environment, but the attensive group is a loosely structured group which is acted upon by its environment. In a sense, the attensive group is the environment which is acted upon by some created environment -- the focus of their attention.

Other Forms of Group Tensity

All aggregates which bear the name "group" do not always possess an energizing force. Such a group who does not may be called "protensive," stemming from the prefix "pro-" defined as "instead of" or "as a substitute for." The statistical group formed from census data, e.g., blue collar workers or middle class, is a protensive group. Such groups possess no internal structure and do not function as a group.

They are, in short, protensive -- without tensity -- and do not possess the nature of grounness.

Other than protensive group classes, nearly all groups contain process or characteristics of tensity. Karl Weick (1969, p. 37-38) argues that if group consensus focues on something tangible, then the tangible object of their focue might very well be action already completed. In other words, group goals may be established before the group is formed (prospective goals) or after the group has been in existence for some time (retrospective goals). In terms of group tensity, a group characterized by retrospective goal setting may be said to exhibit "pretensive" processes. That is, pretensity characterizes the group whose goals are formulated after group formation a during develonment of the group.

"Retensity" might also characterize established groups who develop to such a point that they actually change their goals or recycle their activity to some new purpose. A group in a retensive state is in the process of changing goals and possibl their characteristic tensity. The intensive group, for example, might become so cohesive that it develops into a purely social or attensive group. That period of transition between intensity and attensity might be called a period of retensity.

Certainly not all groups can be classified within a single tensity class. Thus, "subtensity" might refer to a less significant source of tensity in the group and "supratensity" the most important source of group tensity. Because a group may be dually classified, it is important to recognize which tensity class is primary and which is secondary as their energizing force. If a group of Black Panthers meet with a police group, for example, the enacted environment might at once be contensive and intensive depending on the situation. While the group worked out a specific compromise on policy, the group would probably be experiencing contensive processes with their intensive goals assuming a subtensive importance.

Unfortunately, the development of new concepts seems to lead inevitably to the proliferation of new jargon. The authors do not necessarily advocate the immediate use of all the "-tensive" terms included above. But the principle of developing a comparative morphology of groups based on this system's perspective is a new concept which, hopefully, will not be confused with simply an increase of jargon. Certainly the field of small group research does not suffer from a lack of current jargon.

EMPIRICAL RATIONALE

While the foregoing discussion may appear sensible conceptually, it remains to be seen whether these assumptions can be revealed through empirical observation. Preliminary testing sought to discover whether the preceding conceptualizations were empirically feasible and thus worthy of further empirical pursuit. Under no circumstances can the present research be construed as a comprehensive validation of the comparative morphology suggested. Rather, the testing sought to discover the answers to two questions -- Is tensity reflected in group interaction patterns? Can one identify the nature of the prevailing tensity in interaction patterns of groups not otherwise classifiable according to tensity, e.g., family groups?

Procedure

Five groups were selected from current research projects at the same institution. One group was clearly identified as an intensive group. A second group was clearly identified as extensive. The remaining three groups were families with at least one university student as a second-generation member. Audio recordings of interaction of all five groups were subjected to interaction analysis using two different category systems. One system, a derivation of Fisher's (1970), analyzed the content level of group interaction. A second system (Mark, 1971) analyzed the relationship level of group interaction. (For a discussion of the content and relationship levels of human

communication, see Watzlawick, Beavin, and Jackson, 1967, p. 51-54 and 80-93). Inter-rater reliability indices (Guetzkow, 1950, p. 47-50) on the content system were .82 ($p < .01$) and on the relationship system were .94 and .82 on the two dimensions ($p < .01$).

Data from the interaction analyses of each group were then placed within a matrix revealing interacts, i.e., pairs of acts -- antecedent and subsequent acts (see Fisher and Hawes, 1971). The interact matrix of each family was then compared to the interact matrix of the intensive group and also to the interact matrix of the extensive group for each of the two analytical systems. In this way the matrices of the intensive and extensive groups were operationalized as the prototype of interaction for each class of group tensity. Each of the twelve comparisons employed the Spearman rho rank correlation coefficient (Siegel, 1956, pp. 202-213).

Results

The comparisons of the three families with the intensive and extensive groups are summarized in Table 3 below:

Table 3

	Content Level		Relationship Level	
	Intensive	Extensive	Intensive	Extensive
Family I	.9190	.6954	.5333	.9667
Family II	.7343	.7782	.6958	.8958
Family III	.9244	.7683	.5167	.9500

In addition to the correlations between each family and the intensive and extensive groups, correlations were also applied to each pair of families. These results revealed a highly restricted range of intercorrelations among the families themselves-from .929 to .983.

Discussion

The correlations among interact patterns of the groups employed in the empirical test reveal differences among families based on the interact prototypes of the two classes of tensity. As a general rule, family interaction appears to be more intensi than extensive on the content level and more extensive on the relationship level. These results tend to suggest that a multilevel analysis of interaction is necessary to reveal the apparent nuances of group tensity. Watzlawick, Beavin, and Jackson (1967, p. 80-83) discuss a similar phenomenon pertaining to disagreement which exists on one level but not on the other.

Perhaps more interesting than the absolute values of the correlation results is a relative comparison of the three families as they are correlated to the intensive and extensive groups respectively. Such a relative comparison considers not the absolute values of the correlation results, but the values of the correlation results only relative to each other. Table 3 reveals a rather clear and quite consistent pattern of comparison involving Family II. While the interact patterns of the three families correlated highly with each other within a very narrow range, Family II appears to be differentiated more clearly from Families I and III as they are correlated with the two tensive groups. That is, Family II ranks lowest of the three families when compared to the intensive group on the content level and when compared to the extensive group on the relationship level. And Family II ranks highest of the three families when compared with the extensive group on the content level and with th intensive group on the relationship level.

With the exception of only one comparison -- extensive group on the content level -- the correlations of Families I and III are very similar (within .0167) in their interact patterns but dissimilar to Family II (differences of .1847, .1625, and .0542). These results suggest that Family II differs from Families I and III in the nature of tensity reflected in the interact patterns. Such an inference appears

plausible given the additional observation that comparisons among the three families b themselves failed to suggest any difference at all in the interact patterns of Family II when compared with either Family I or Family III.

Although these results do not necessarily attempt to validate the existence of th comparative morphology of groups suggested earlier, empirical basis for suggesting tha further empirical studies are feasible and potentially worthwhile. In terms of the two questions asked prior to the preliminary empirical testing, the results appear promising. In response to the first question, whether tensity is reflected in group interact patterns, the answer is necessarily qualified. Only two of the tensive classes were employed, and only one group from each class was observed. Further inter action analysis is needed to characterize each tensive class in terms of specific inte act patterns.

In response to the second question, whether interact patterns can reveal variations in tensity of unclassifiable groups -- specifically families, the answer is yes. While these results are only suggestive and are based on relative rather than absolute comparisons, families apparently do differ from each other in terms of tensity. Of course, more concrete analysis is needed to identify the specific interact patterns characteristic of each class of group tensity. Furthermore, analysis should probably incorporate both content and relationship levels of communication.

IMPLICATIONS FOR FUTURE RESEARCH

In general the tensity orientation functions to reformulate theoretical perspectives. The results from these data suggest that one need not blindly accept assumption about what type of group is being observed or has been experimentally created. Given Ashby's principle of self-regulation, one should no longer assume a priori that the nature of a group is extensive or intensive without first validating its energizing

force. The results suggest further that families probably vary in the tensity of their interaction--some extensive and some intensive -- thus requiring a group classification more precise than "family."

A prerequisite for the further consideration of groups from a tensity perspective is the development of observation tools to measure tensity. The goal of such an endeavor is to devise a system to analyze interaction in order to tap indices of interaction tensity across groups. Only then will an operationalization of the various tensities by interact patterns be possible. A useful first step in the creation of an appropriate category system may stem from the analysis presented in this paper. That is, specific cells of group interaction within the same tensity class which are consistently highly correlated would probably reflect some interactive index of that tensity. Specific varieties of interacts, for example, may possess structural similarities across groups but function variably according to the situation. What is needed are more discrete functional categories which serve to typify specific tensities. Following sufficient descriptive and exploratory research such a technique could become prescriptive in nature with the unique capability of measureing a group's

interaction at any point in time, specifying its tensity, and refocusing the group in a more desirable direction.

Furthermore, a group's tensity may determine how that group develops over time. An ongoing group with considerable history may stabilize within a tensity class, although it may develop via a consistent pattern of changing tensities prior to stabilization. Furthermore one class of tensive groups may develop differently from another class of groups. The group development literature might be reexamined via tensity interaction analysis in an effort to discover

the relationship between phasic development and the group's interface with its environing system.

The tensity perspective may also provide a starting point for theoretical development by the human potential movement(essentially intensive groups). The human relations orientation lacks a consistent conceptual framework probably because of its preoccupation with specific techniques (Gibb, 1971). Conceptualizing such human relations groups as generally intensive and noting the attendant assumptions of tensity should be instrumental to comprehensive theory development in that field.

Finally, the tensity orientation does not deny the value of experimental manipulation , but rather makes experimentation more applicable. Structural and compositional variables are a viable area of inquiry providing we are cautious about generalizing across morphological classes of groups. For example, a closed system in which initial conditions render the goal state predictable (e.g., intensive groups), compositional variables become extremely influential. A group characterized by system openness (e.g., extensive groups), however, would be less susceptible to prediction of outcomes from initial variables of group composition. Again assuming that the analysis of group tensity is accurate and stable, compositional variables of groups become much more precise in meaning and research importance.

It has been fashionable and probably beneficial in recent years to denegrate the status of small group research. But unless communication scholars strive for consistency in research perspectives and generalizable results, we will continue to publish articles decrying the anemia of small group research and our journals will continue to fill with parochial and ungeneralizable research

reports. Tensity is a useful conceptual framework from which groups may be perceived and observed. And a comparative morphology of groups based on tensity shows promise as a framework within which researchers and research programs may be integrated. And from integration of research efforts comes progress and thus cumulative knowledge. And that is what research is about.

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